

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-014510**Date Inspected:** 02-Jun-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1500**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site

CWI Name:	Bernard Docena, Bnifacio Daquing, Wilsong Bayab			CWI Present:	Yes	No	
Inspected CWI report:	Yes	No	N/A	Rod Oven in Use:	Yes	No	N/A
Electrode to specification:	Yes	No	N/A	Weld Procedures Followed:	Yes	No	N/A
Qualified Welders:	Yes	No	N/A	Verified Joint Fit-up:	Yes	No	N/A
Approved Drawings:	Yes	No	N/A	Approved WPS:	Yes	No	N/A
				Delayed / Cancelled:	Yes	No	N/A
Bridge No:	34-0006			Component:	SAS OBG		

Summary of Items Observed:

The Quality Assurance (QA) Inspector, Rick Bettencourt was on site at the job site between the times noted above. The QA Inspector was on site to randomly observe the in process welding and inspection of the weld joints identified 1W/2W-C, 3W/4W-E and 4W/5W-A and the following observations were made:

3W/4W-E1

The QA Inspector randomly observed the ABF welder Song Tao Hunag had previously started the induction heating blankets on the inside of OBG to ensure the minimum required preheat of 150°F was achieved prior to welding. The QA Inspector randomly verified utilizing a 150°F temperature indicating marker and noted the minimum required preheat had been achieved. The QA Inspector observed the ABF welder to be utilizing flux cored arc welding (FCAW) manually for the above identified weld joint. The QA Inspector randomly observed the Smith Emery (SE) QC Inspector identified as Bernard Docena set the FCAW machine to the parameters of the approved WPS identified as ABF-WPS-D1.5-3042A The QA Inspector randomly observed the FCAW parameters were 247 Amps, 23.9 Volts and a travel speed of 320mm/min. The QA Inspector randomly observed the ABF welder identified above start the FCAW root pass on the top 800mm of the weld joint in the am. The QA Inspector noted the ABF welder spent the remainder of the QA Inspectors shift performing the FCAW fill passes. The QA Inspector randomly and periodically observed the welding at the above identified location. It was noted by the QA Inspector the ABF welder did not complete the FCAW on the QA Inspectors shift.

1W/2W-C2

Upon the arrival of the QA Inspector it was noted the ABF welder James Zhen and Chun Fai Tsui were on site to perform excavations and weld repairs from previously rejected and indicated weld defects. The QA Inspector

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randomly observed the SE QC Inspector Tom Pasqualone was present at the time of the excavations. The QA Inspector randomly observed the ABF welder James Zhen begin excavating the ultrasonic testing (UT) reject beginning at Y=5195mm and extending 65mm. The QA Inspector randomly observed and noted the ABF welder was utilizing a burr bit grinder to perform the excavation. The QA Inspector noted the original UT rejection was indicated at 8mm in depth.

The QA Inspector randomly observed the ABF welder Chun Fai Tsui begin excavating the ultrasonic testing (UT) reject beginning at Y=3440mm and extending 70mm. The QA Inspector randomly observed and noted the ABF welder was utilizing a burr bit grinder to perform the excavation. The QA Inspector noted the original UT rejection was indicated at 8mm in depth. The QA Inspector did not observe the SMAW weld repair, the ABF welders were performing the grinding tasks of the excavations for the remainder of the QA Inspectors shift.

4W/5W-A

Upon the arrival of the QA Inspector it was observed the ABF welder identified as Rick Clayborn had completed the installation of the fit up gear on the bottom skin plate identified as "D". The QA Inspector randomly observed the ABF welder move to the "A" plate and begin fitting up the steel backing bar under the top deck with wedges. The QA Inspector performed a random dimensional verification of the planar misalignment of the top deck plate. The QA Inspector randomly observed no fitting aids or fitting tasks had yet been performed on the top deck plate. The QA Inspector randomly measured 580mm of total planar misalignment beginning at the end of weld segment A5. The QA Inspector noted the total off set or misalignment appeared to be 6mm. It was noted ABF had not yet performed any fitting tasks of the two members at the time of the QA Inspectors arrival. The QA Inspector informed the ABF Engineer John Callaghan of the misalignment and Mr. Callaghan informed the QA Inspector he was aware of the misalignment and fitting tasks would be performed to correct it.



Summary of Conversations:

As noted above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mohammad Fatemi (916)-813-3677, who represents the Office of Structural Materials for your project.

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Inspected By:	Bettencourt,Rick	Quality Assurance Inspector
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Reviewed By:	Levell,Bill	QA Reviewer
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